

SOURCE: Ricondo & Associates, Inc., December 2019.

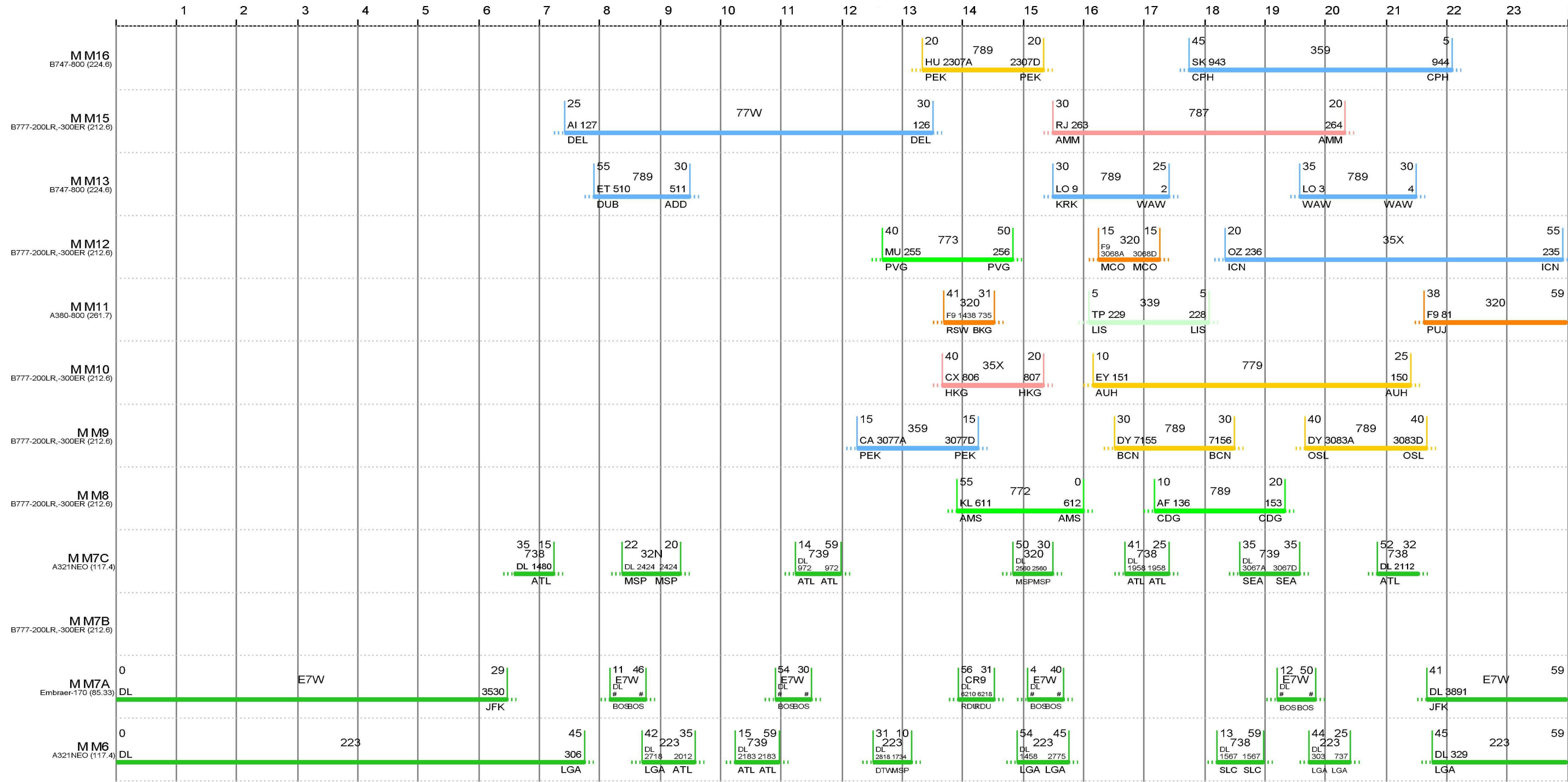
EXHIBIT 1-4 (1 OF 22)

Ramp Charts



EXHIBIT 1-4 (2 OF 22)

Ramp Charts



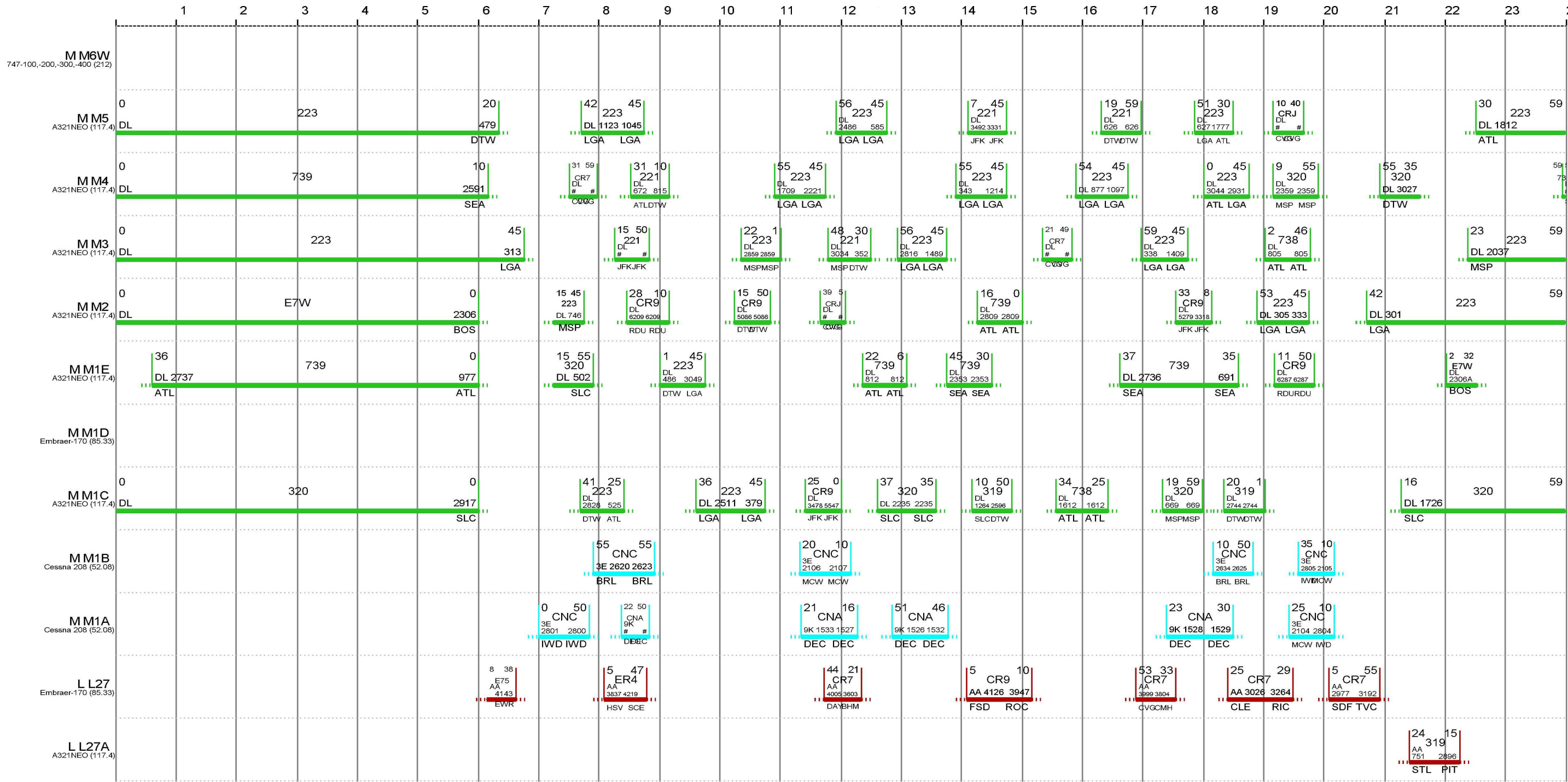
SOURCE: Ricondo & Associates, Inc., December 2019.

EXHIBIT 1-4 (3 OF 22)

Ramp Charts



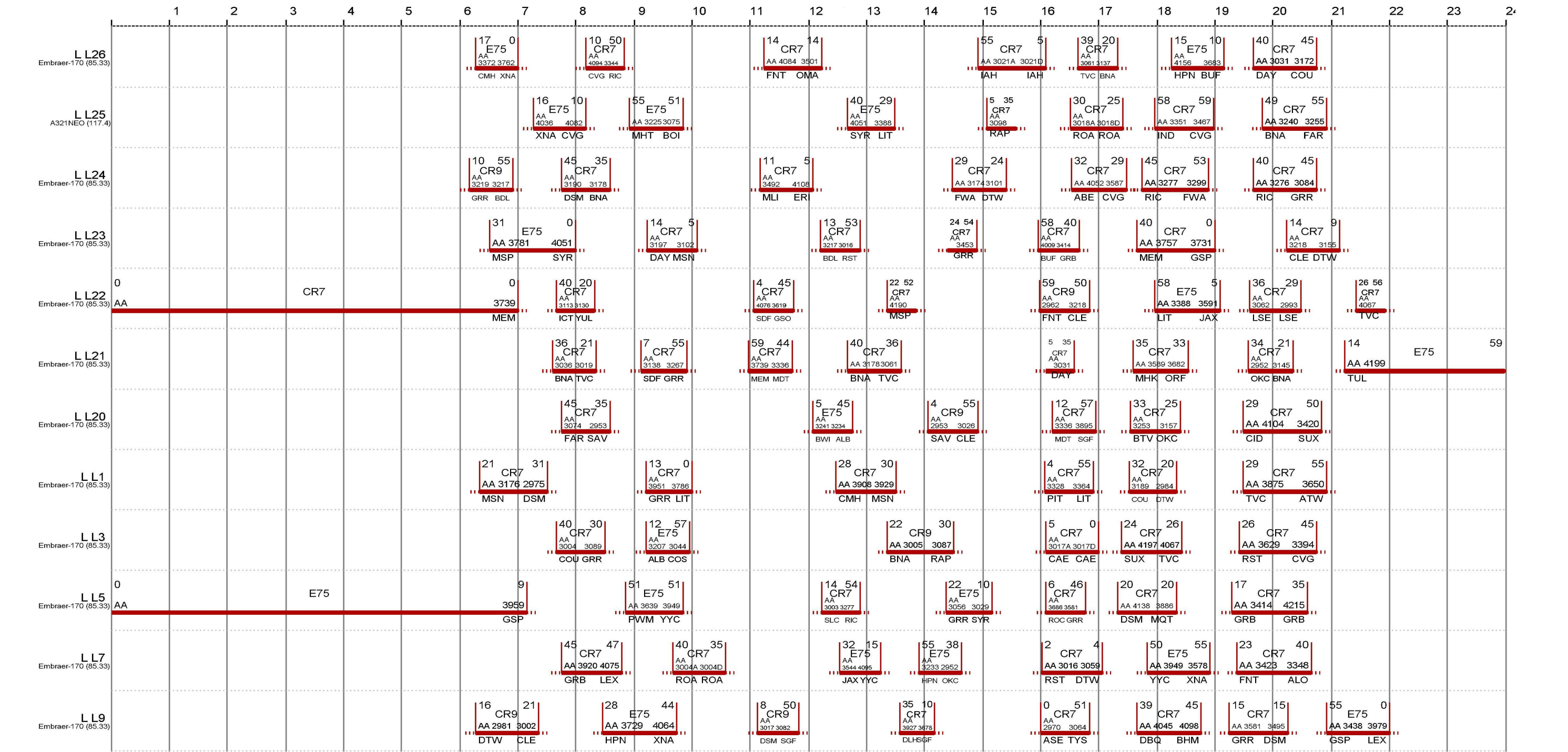
NOVEMBER 2020



SOURCE: Ricondo & Associates, Inc., December 2019.

EXHIBIT 1-4 (4 OF 22)

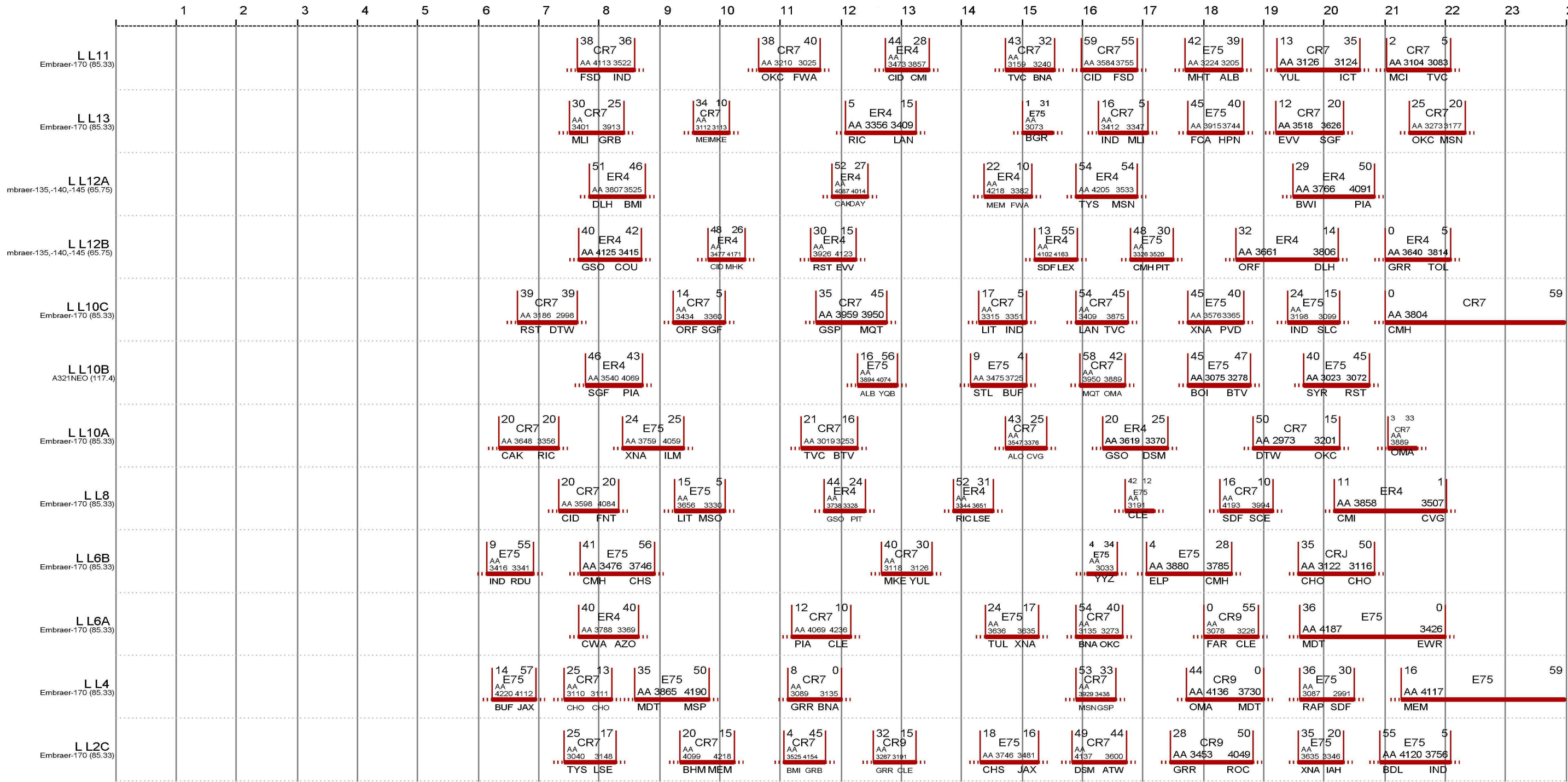
Ramp Charts



SOURCE: Ricondo & Associates, Inc., December 2019.

EXHIBIT 1-4 (5 OF 22)

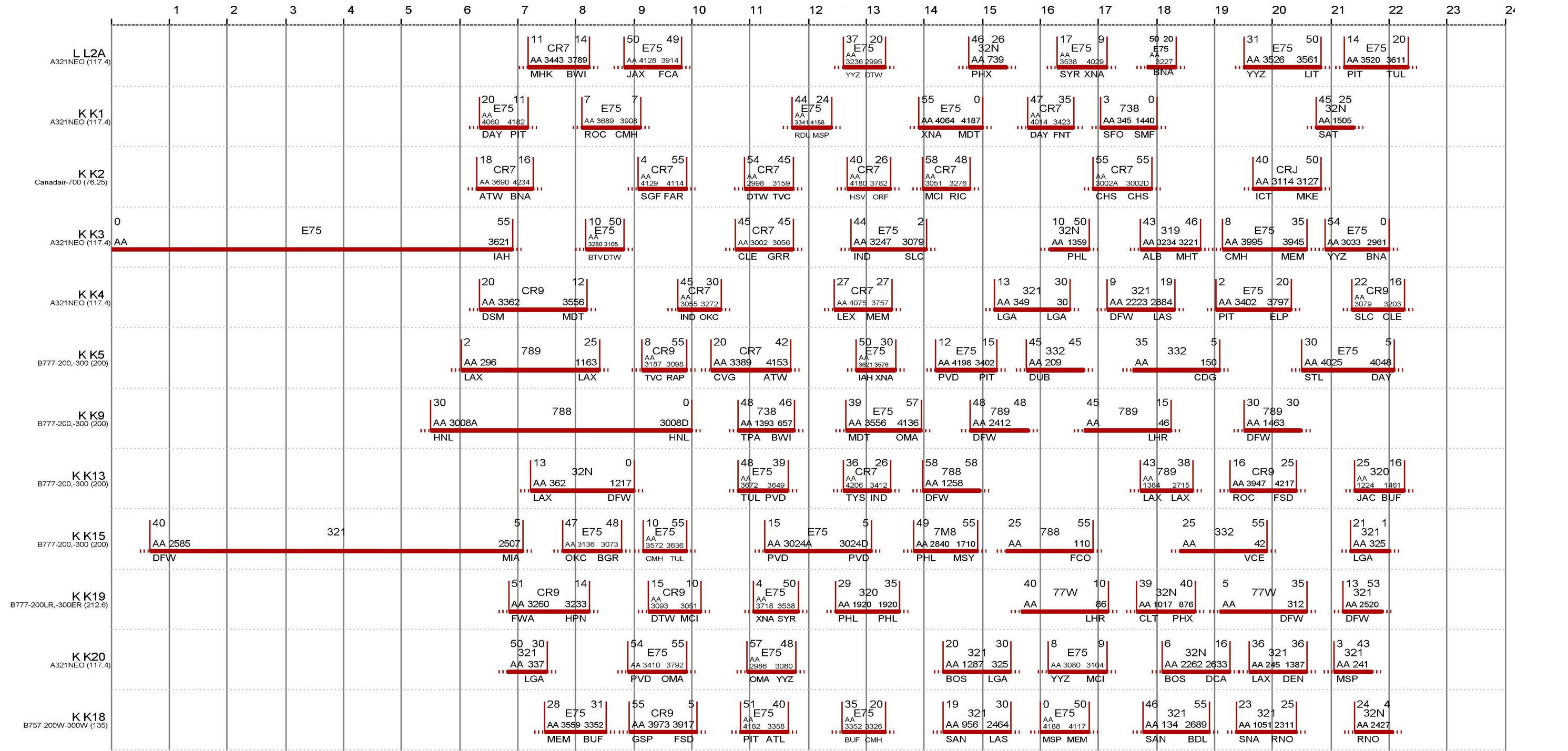
Ramp Charts



SOURCE: Ricondo & Associates, Inc., December 2019.

EXHIBIT 1-4 (6 OF 22)

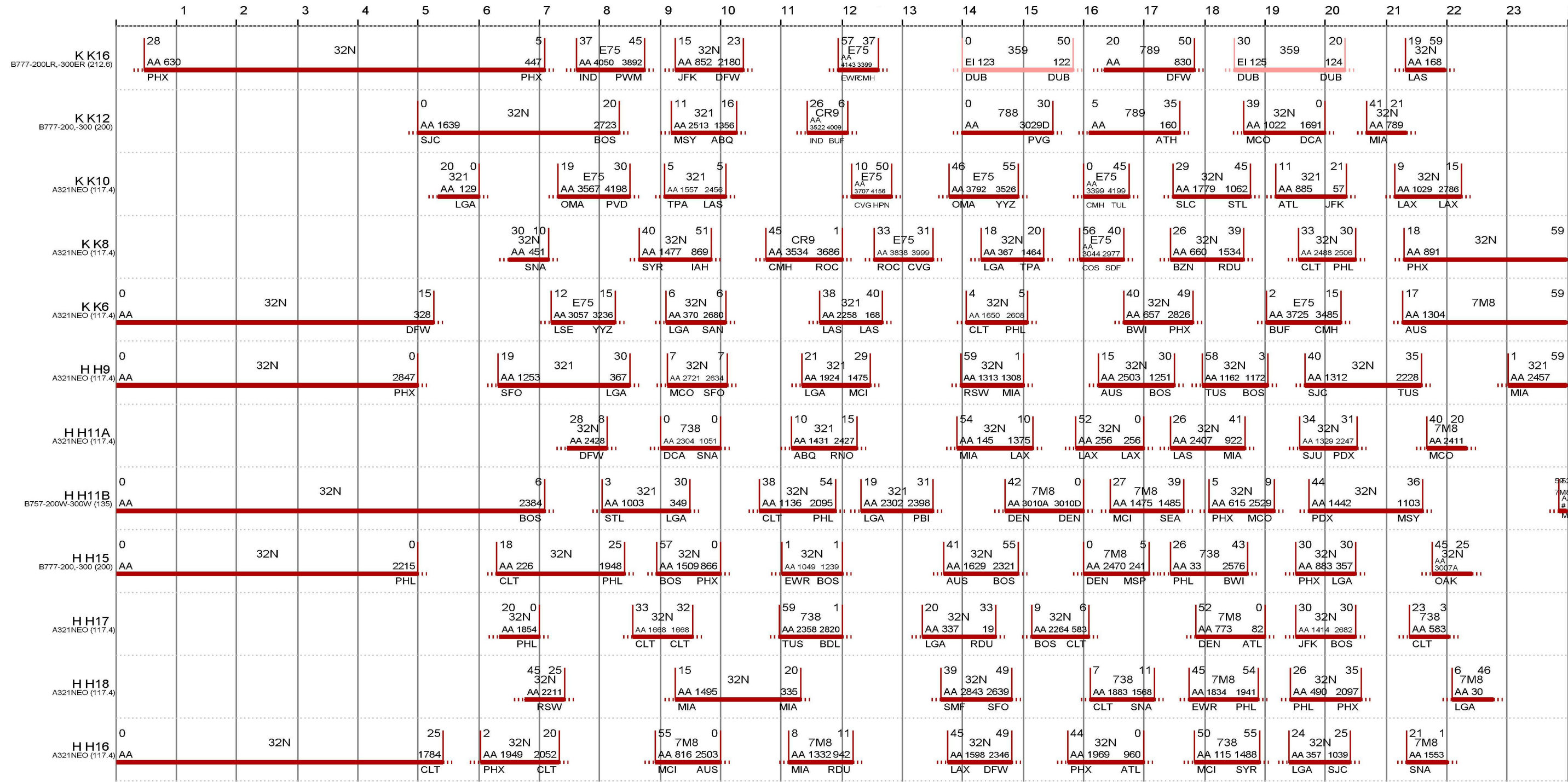
Ramp Charts



SOURCE: Ricondo & Associates, Inc., December 2019.

EXHIBIT 1-4 (7 OF 22)

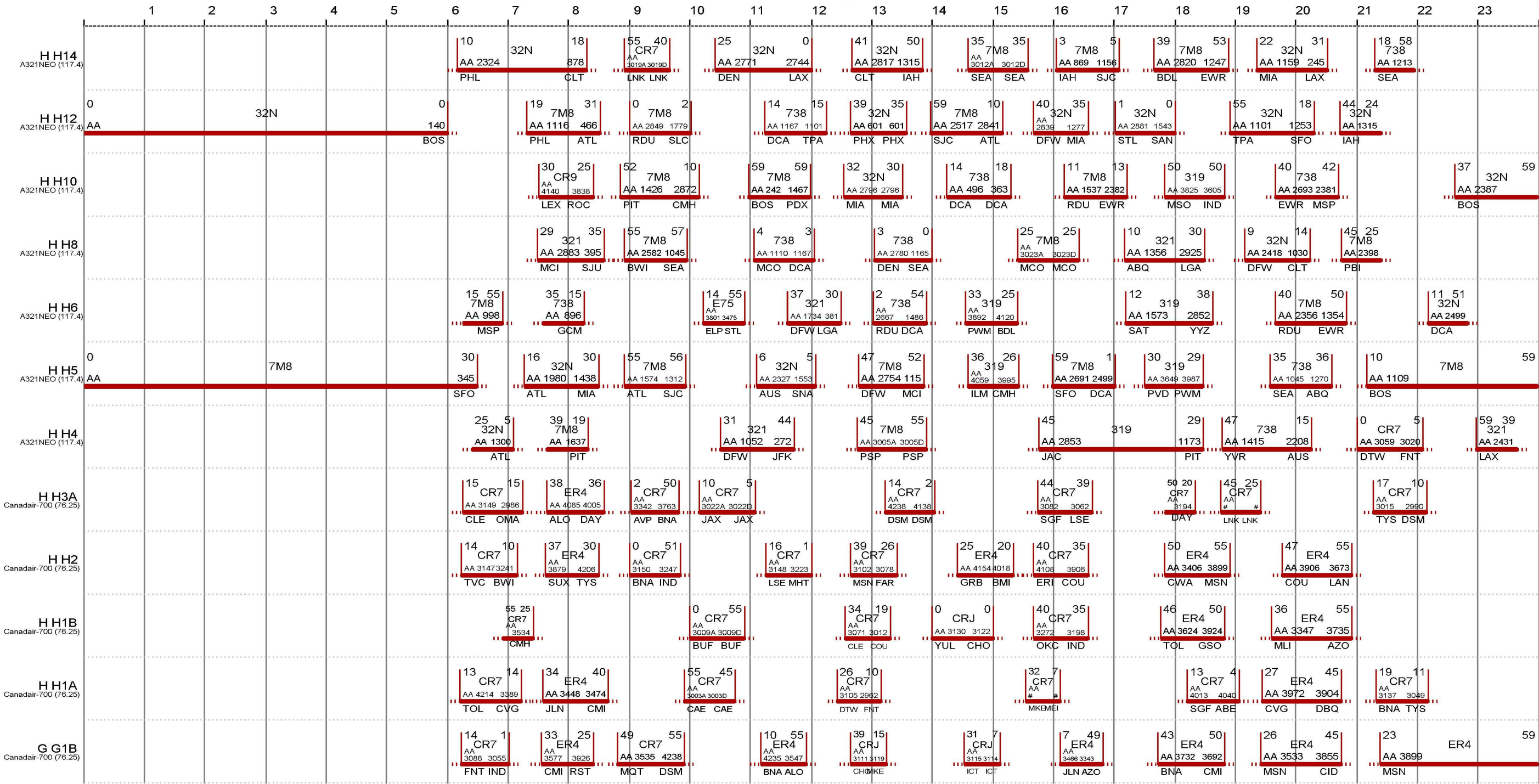
Ramp Charts



SOURCE: Ricondo & Associates, Inc., December 2019.

EXHIBIT 1-4 (8 OF 22)

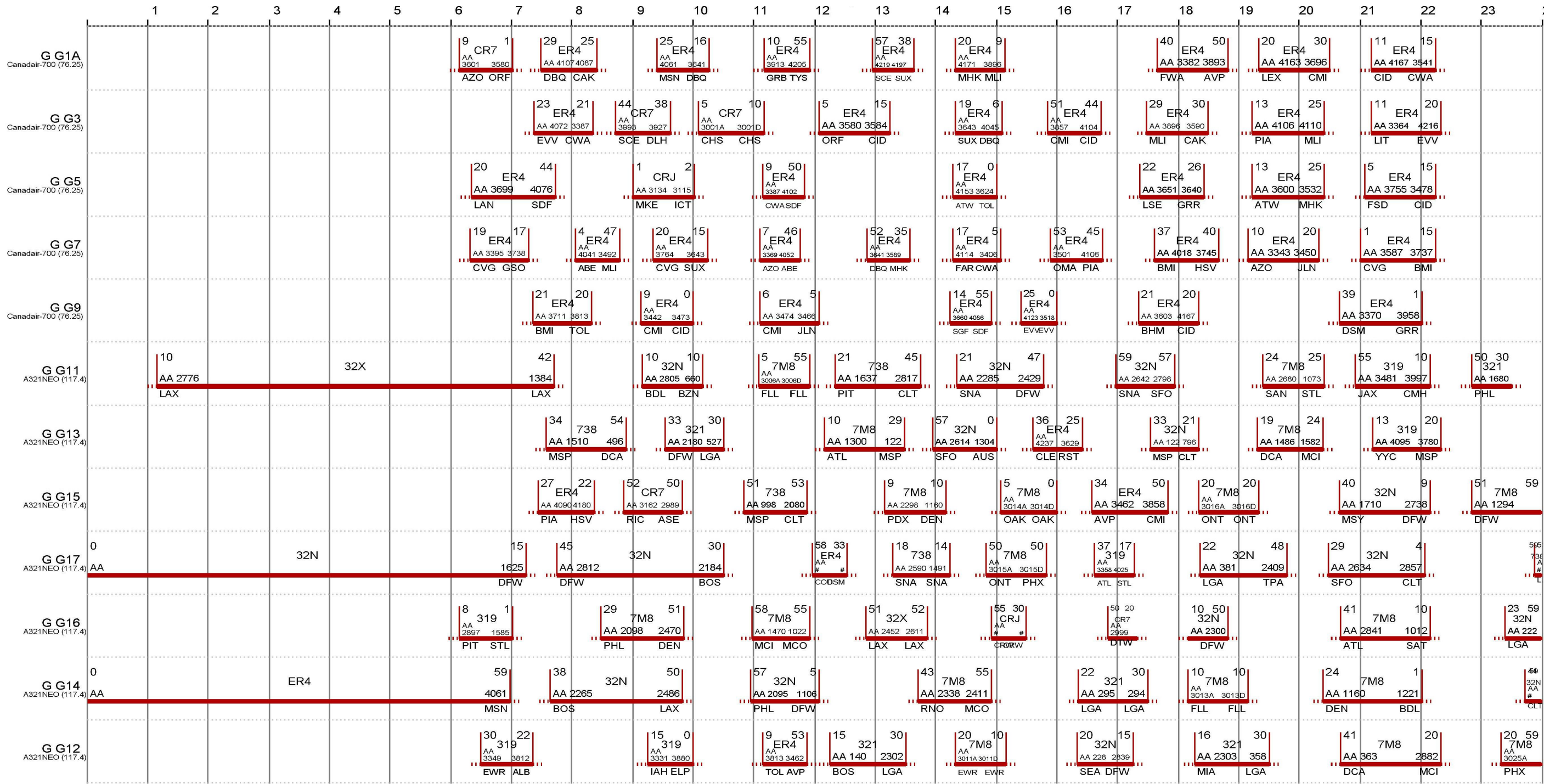
Ramp Charts



SOURCE: Ricondo & Associates, Inc., December 2019.

EXHIBIT 1-4 (9 OF 22)

Ramp Charts

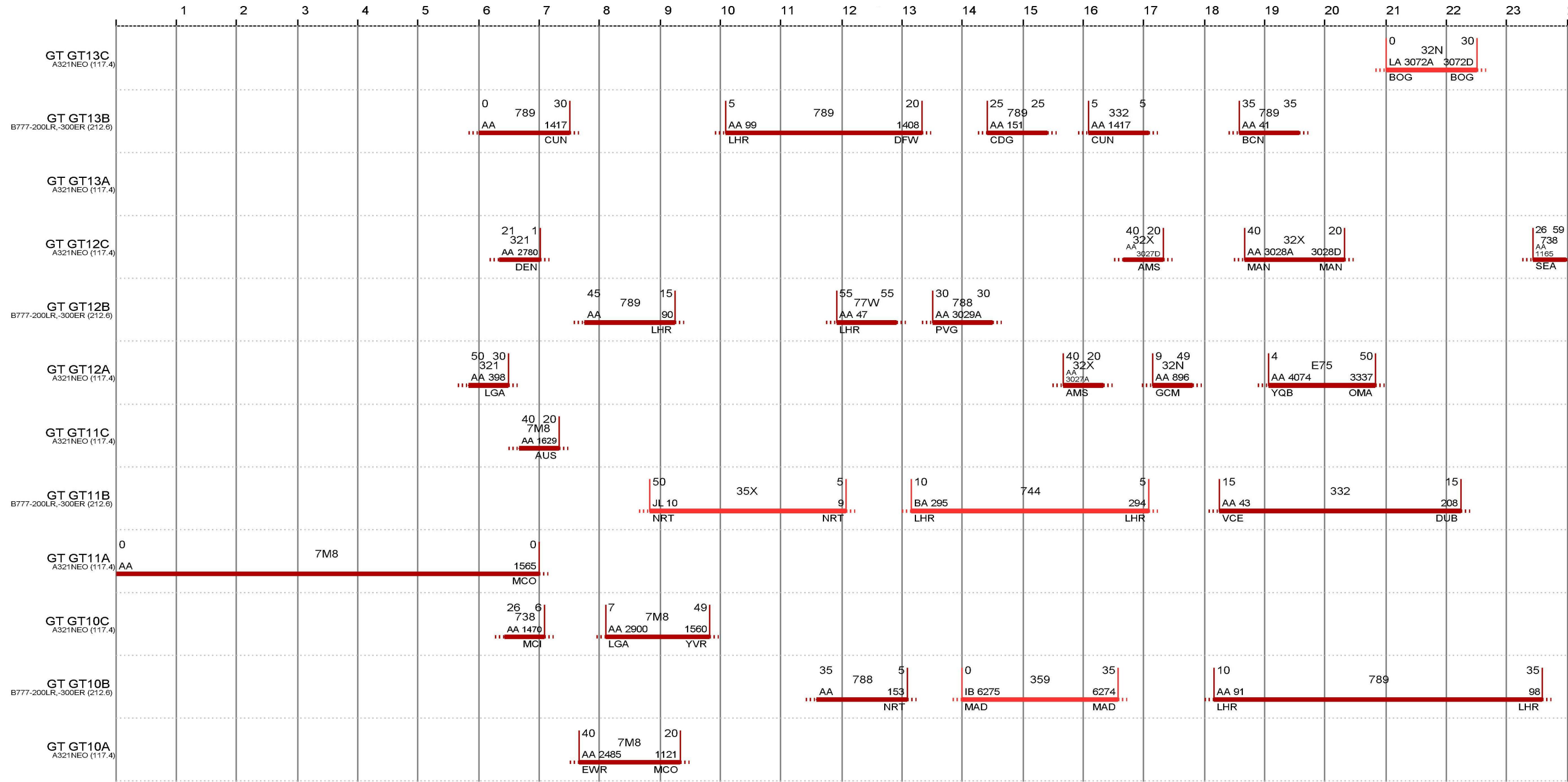


SOURCE: Ricondo & Associates, Inc., December 2019.

EXHIBIT 1-4 (10 OF 22)

Ramp Charts

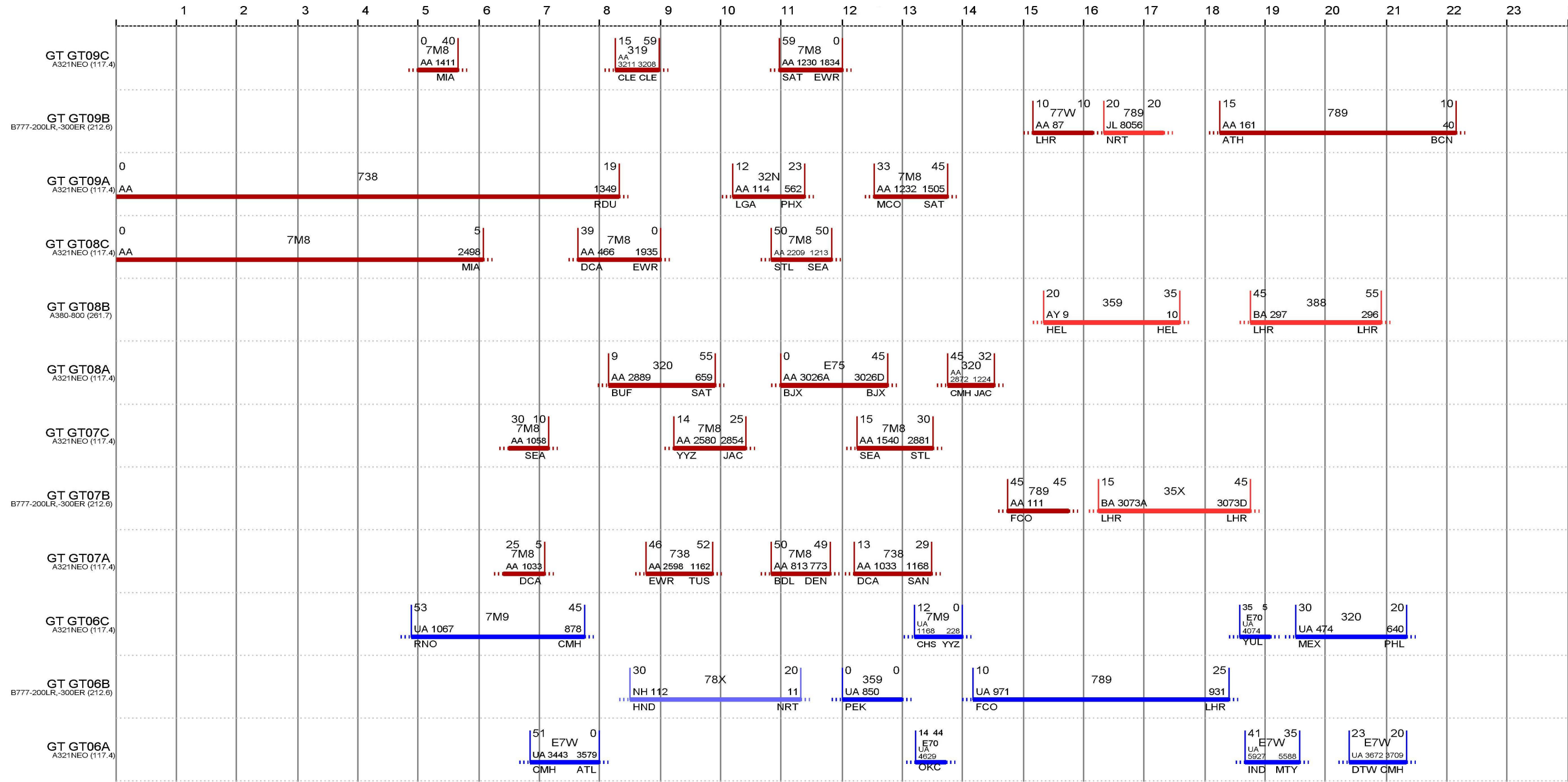
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SOURCE: Ricondo & Associates, Inc., December 2019.

EXHIBIT 1-4 (11 OF 22)

Ramp Charts



SOURCE: Ricondo & Associates, Inc., December 2019.

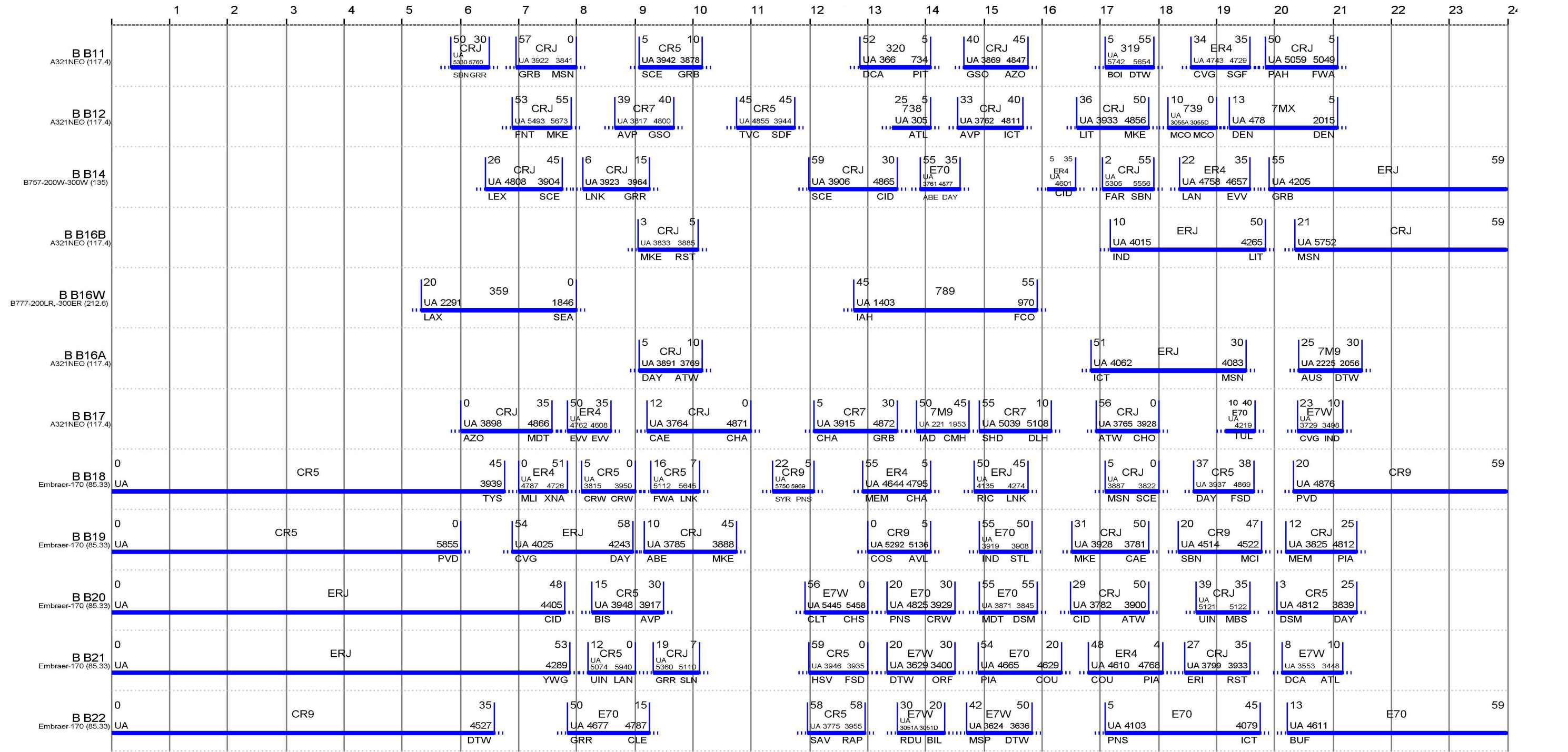
EXHIBIT 1-4 (12 OF 22)

Ramp Charts



EXHIBIT 1-4 (13 OF 22)

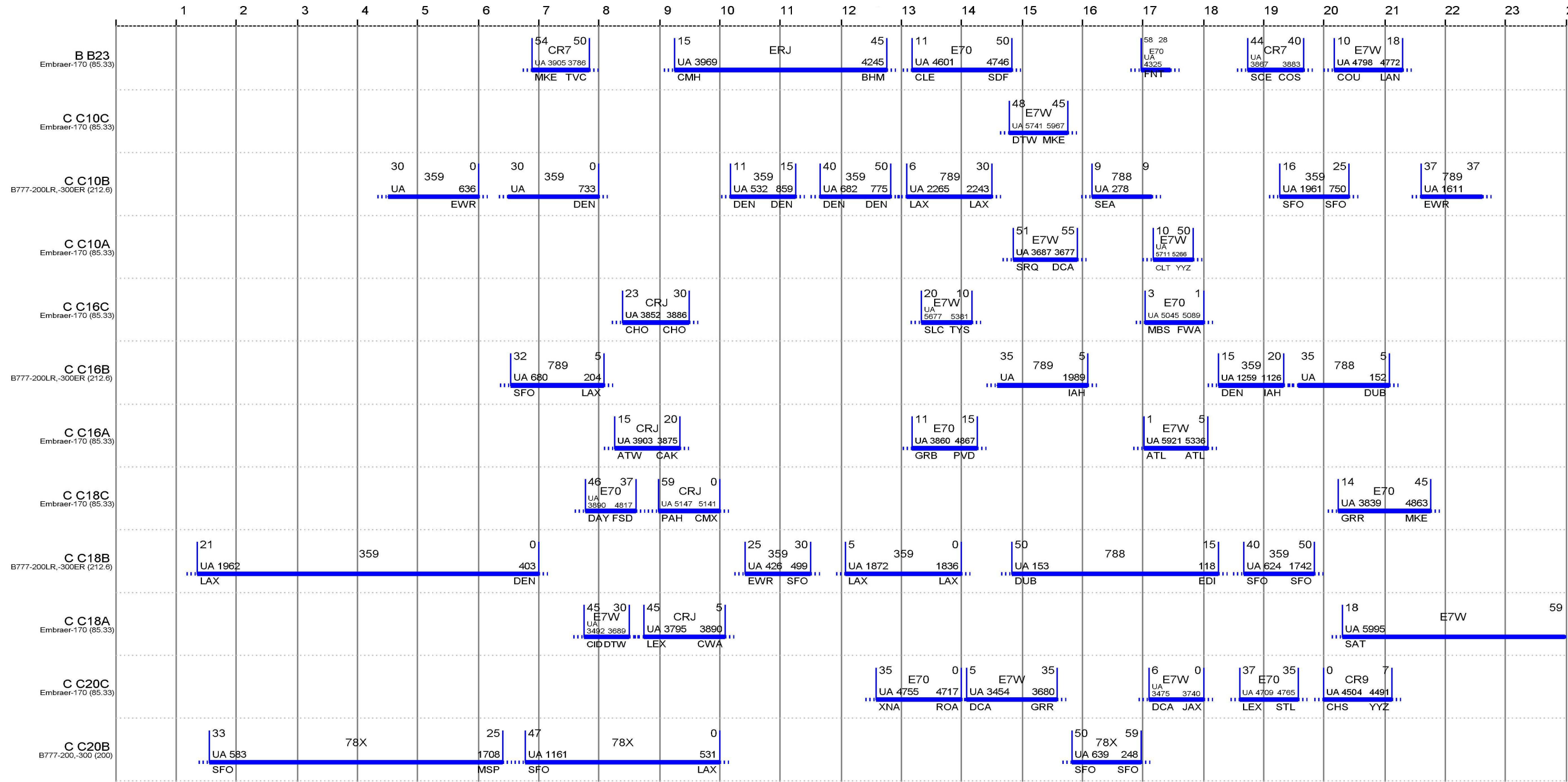
Ramp Charts



SOURCE: Ricondo & Associates, Inc., December 2019.

EXHIBIT 1-4 (14 OF 22)

Ramp Charts

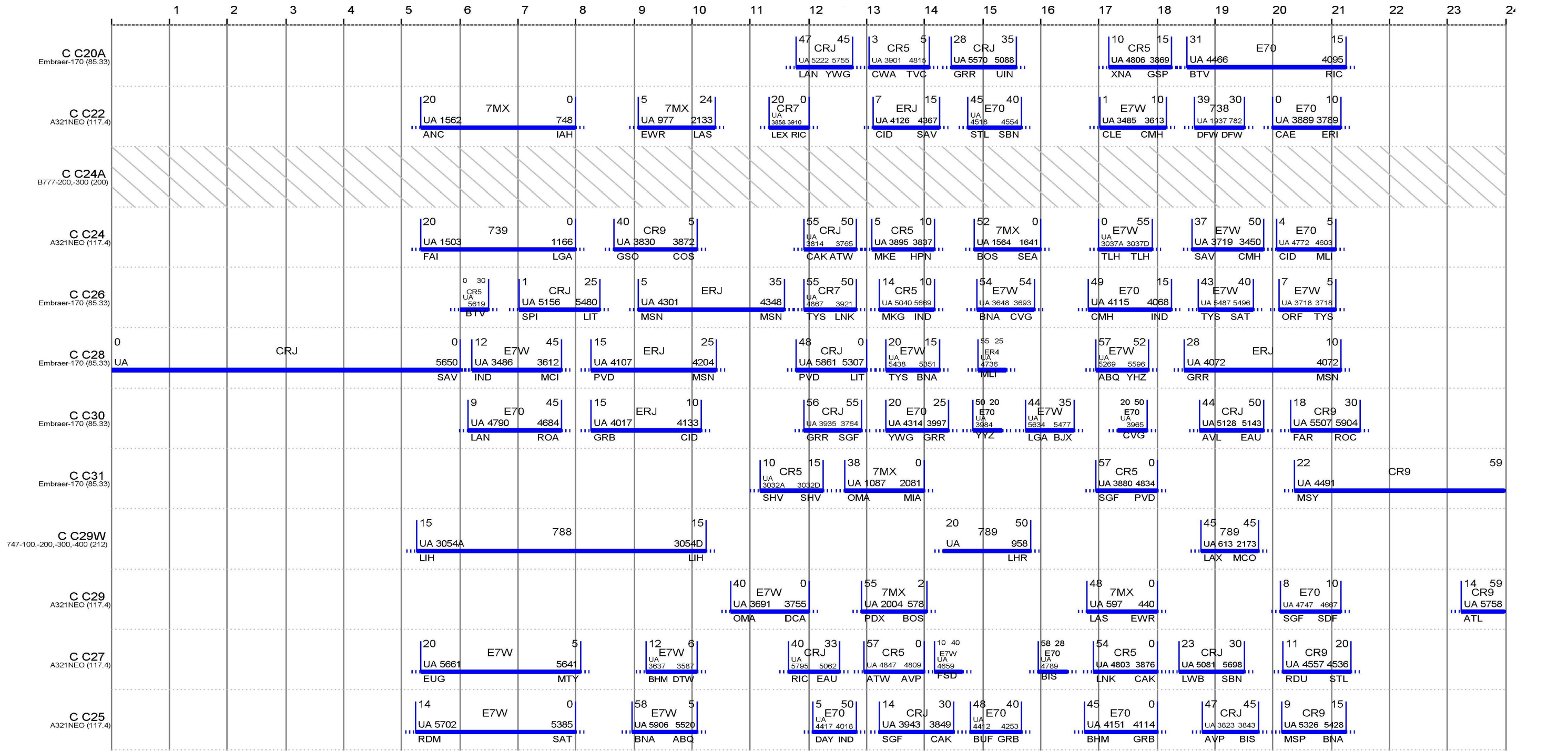


SOURCE: Ricondo & Associates, Inc., December 2019.

EXHIBIT 1-4 (15 OF 22)

Ramp Charts

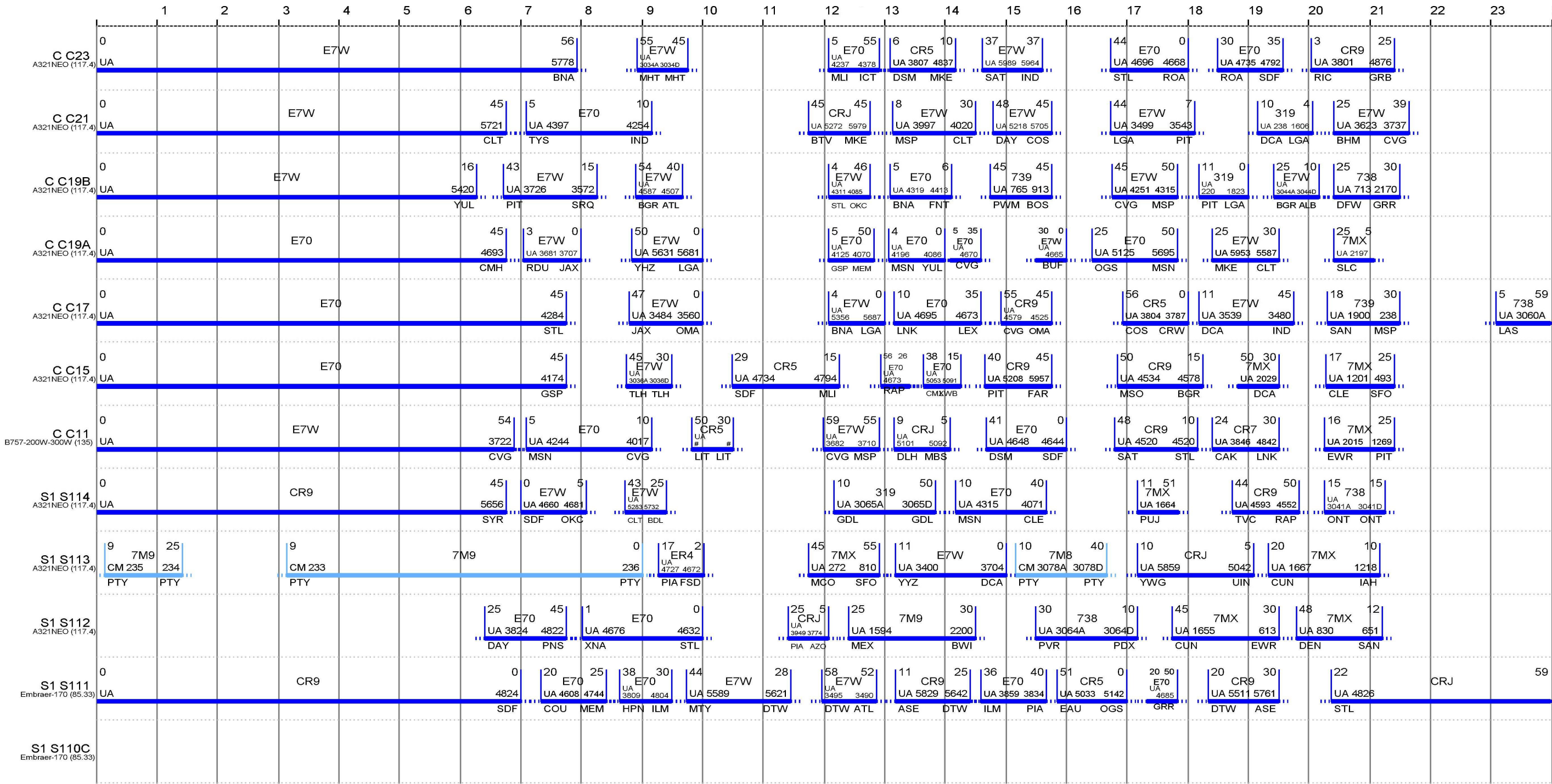
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SOURCE: Ricondo & Associates, Inc., December 2019.

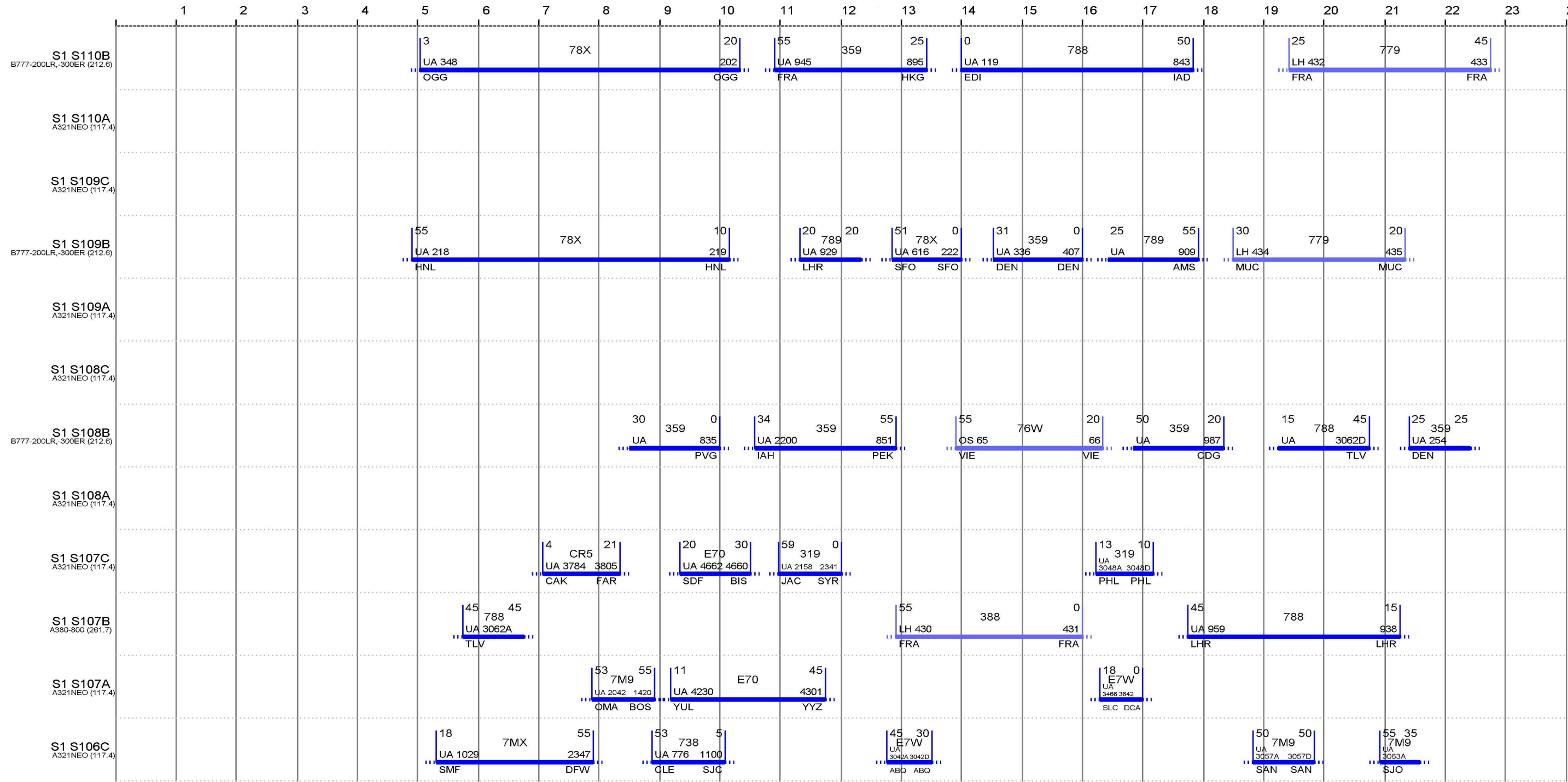
EXHIBIT 1-4 (16 OF 22)

Ramp Charts



SOURCE: Ricondo & Associates, Inc., December 2019.

Ramp Charts

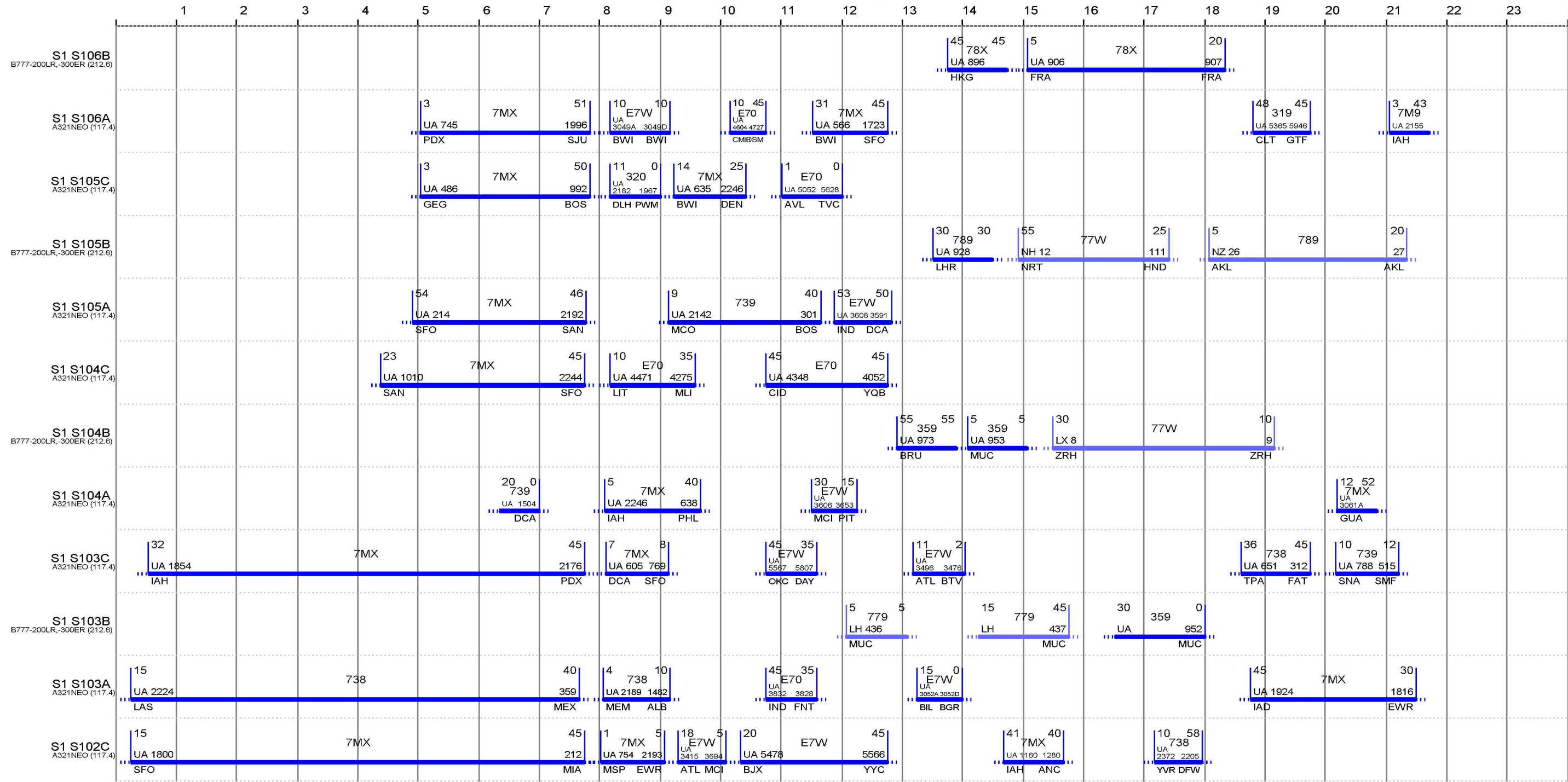


SOURCE: Ricondo & Associates, Inc., December 2019.

EXHIBIT 1-4 (18 OF 22)

Ramp Charts

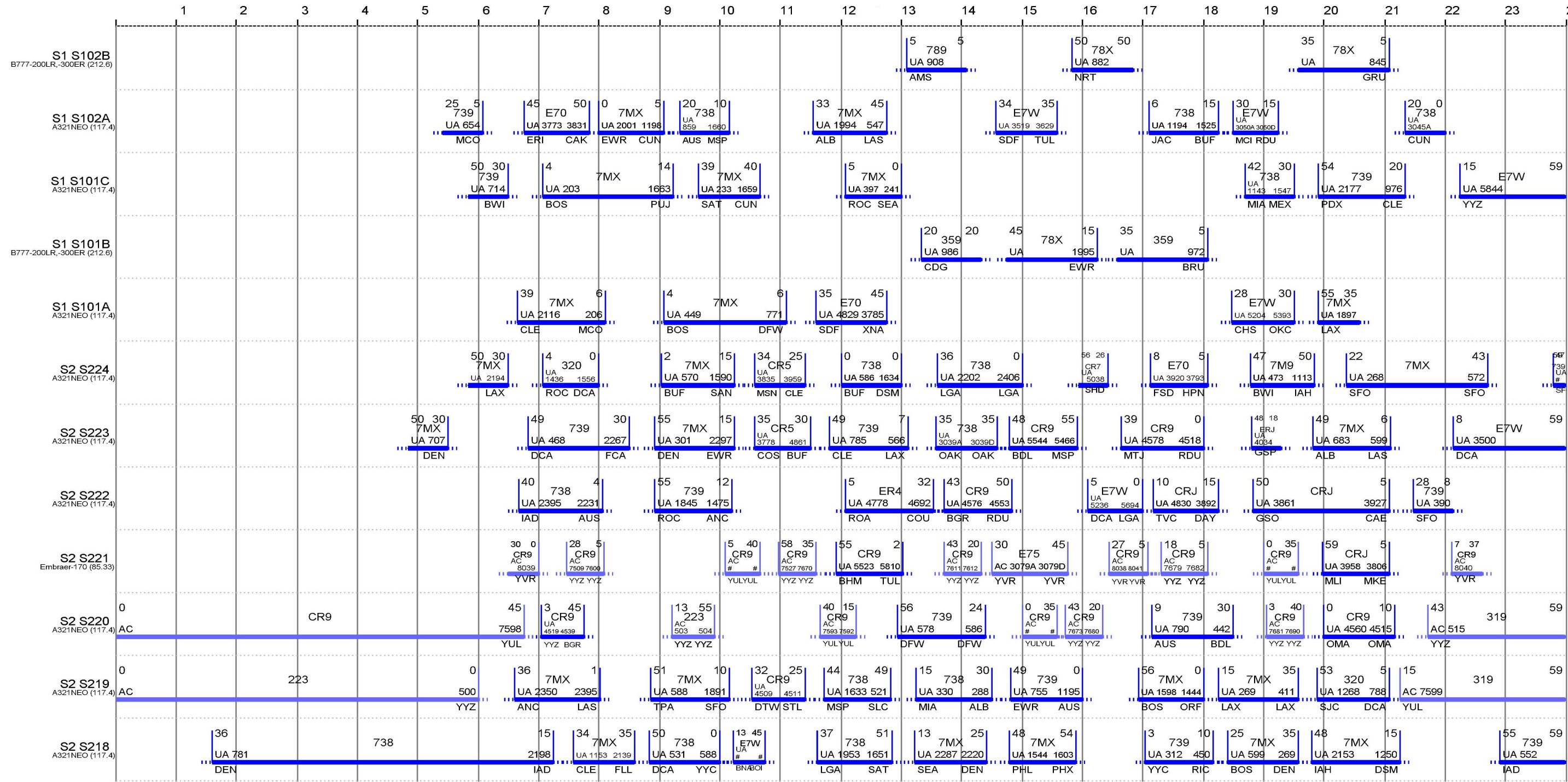
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SOURCE: Ricondo & Associates, Inc., December 2019.

EXHIBIT 1-4 (19 OF 22)

Ramp Charts



SOURCE: Ricondo & Associates, Inc., December 2019.

EXHIBIT 1-4 (20 OF 22)

Ramp Charts

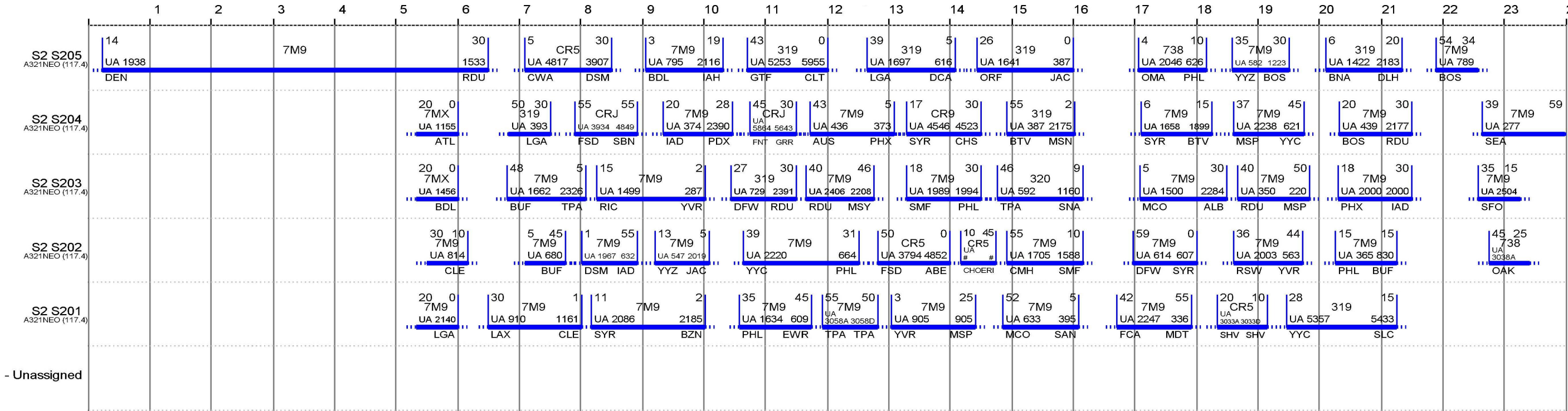


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S2 S217 A321NEO (117.4)						28 UA 1719 BWI	7MX 1740 SNA	17 1740 ALB	48 UA 2133 SEA	5 635 MOB	20 CR5 UA 3030A 3080D MOB	15	4 738 UA 721 498 IAD	0 IAD	15 738 UA 3040A 3040D ONT	20 ONT	44 CR9 UA 4558 4528 ATL	37 TVC		56 7MX UA 679 246 PDX	5 TPA	19 7MX UA 1180 518 EWR	45 PDX	3 738 UA 976 350 SMF	18 MCI		48 739 UA 661 LAX	59			
S2 S216 A321NEO (117.4)	0 UA		738				0 1146 LGA	25 738 UA 761 1266 LGA	26 1266 OMA	41 738 UA 1464 2001 ORF	30 2001 ORF	10 45 E70 UA 4634 4711 SGFFAR	29 739 UA 305 374 BDL	45 374 IAH	8 7MX UA 2385 656 DEN	15 656 BUF	43 7MX UA 248 1502 PHX	49 1502 FAI		56 7MX UA 555 369 SAN	10 369 LAX	25 7MX UA 563 1810 PHL	35 1810 YYZ	45 7MX UA 298 670 YVR	10 670 BOS		48 28 7MX UA 2131 IAH				
S2 S215 A321NEO (117.4)						50 7MX UA 1421 ALB	30 739 UA 2097 381 LAX	10 381 PHL	42 319 UA 1553 2025 PWM	30 2025 RDU	3 E7W UA 5759 5590 BIL	0 5590 DCA	12 738 UA 2081 570 ORF	43 570 YVR	19 739 UA 2209 2240 PHL	40 2240 CLE	55 25 CR7 UA 5633 TVC		4 7MX UA 1899 597 IAH	15 597 BWI	28 7MX UA 1704 262 CLE	50 262 SEA	10 738 UA 2211 226 MCI	15 226 BWI		46 738 UA 1249 LGA	59				
S2 S214 A321NEO (117.4)						40 7MX UA 2166 SFO	20 739 UA 558 1436 DTW	50 1436 SLC	53 320 UA 519 1270 PIT	30 1270 SAV	19 738 UA 1850 2397 MCO	29 2397 CMH	43 7MX UA 2075 549 EWR	50 549 PDX	3 738 UA 656 509 PHX	0 509 LGA	39 738 UA 2404 994 RSW	55 994 MCI		10 739 UA 2184 679 BZN	30 679 ROC	50 7M9 UA 483 1261 BUF	15 1261 AUS	52 UA 693 LGA		319	59				
S2 S213 A321NEO (117.4)						19 UA 1524 PHX	320 1683 MSP	45 1683 MSP	25 320 UA 628 2097 LGA	30 2097 MYR	0 7MX UA 775 310 BOS	45 310 LAX	58 7MX UA 1251 230 BOS	0 230 EWR	39 7MX UA 1728 541 FLL	49 541 LAS		47 7MX UA 1126 743 MSP	59 743 SFO		50 CRJ UA 3771 4870 ABE	45 4870 CWA	7 47 7M9 UA 1568 PIT								
S2 S212 A321NEO (117.4)						9 UA 1279 YVR	319 2227 CHS	50 2227 CHS	25 319 UA 490 1621 BTV	30 1621 BTV	41 738 UA 463 2178 LGA	30 2178 LGA	44 738 UA 5679 5364 LGA	0 5364 LAS	37 738 UA 1213 2212 LGA	41 2212 BNA		44 7MX UA 743 765 EWR	56 765 DEN		45 320 UA 1531 2204 MSN	46 2204 CLE	2 7MX UA 670 1186 SEA	20 1186 LAX		15 55 738 UA 3059A PDX					
S2 S211 A321NEO (117.4)						6 UA 1285 FAT	320 2306 YVR	45 2306 YVR	24 319 UA 5958 5375 DTW	6 5375 TYS	0 319 UA 3536 3518 MSY	0 3518 LGA	57 320 UA 241 537 ATL	45 537 DFW	5 738 UA 230 1128 SNA	15 1128 IAH	53 320 UA 843 639 RDU	0 639 LGA		38 7MX UA 1219 790 SNA	55 790 BOS	25 319 UA 5854 5691 LGA	30 5691 BOI	52 320 UA 1709 2346 LGA	13 2346 MEM		55 35 319 UA 2214 LGA				
S2 S210 A321NEO (117.4)						19 UA 619 SEA	7M9 558 ROC	45 558 ROC	2 CR7 UA 3873 3874 FAR	0 3874 ABE	16 738 UA 1660 725 MDT	15 725 PHX	25 7MX UA 1605 2167 MSP	30 2167 RSW	50 320 UA 1574 2088 PIT	55 2088 OMA	12 E7W UA 5274 5970 BOI	0 5970 SYR	2 320 UA 370 556 ALB	50 556 BDL	3 320 UA 2284 2039 DCA	5 2039 RNO		4 319 UA 4597 4589 ELP	15 4589 CHS	31 738 UA 515 2061 CMH	30 2061 IAD	19 320 UA 2074 483 BDL	30 483 PHX	15 55 319 UA 3047A PHX	
S2 S209 A321NEO (117.4)						20 319 UA 1023 DCA	0 47 UA 206 476 GRR	50 476 YYZ	11 320 UA 1888 910 DFW	0 910 LGA	51 320 UA 1496 1505 DCA	40 1505 RAP		42 319 UA 5996 5426 YUL	55 5426 AUS	8 E7W UA 5950 5965 MCI	0 5965 MDT	1 319 UA 3618 3581 JAX	45 3581 JAX	5 35 E70 UA 4774 LAN		51 738 UA 741 418 LGA	45 418 PWM	59 E7W UA 5636 5267 LGA	50 5267 BIL	19 UA 3941 ICT		CR5	59		
S2 S208 A321NEO (117.4)						20 UA 995 SFO	7M9 1272 PIT	50 1272 PIT	5 319 UA 3621 3686 IND	0 3686 DCA	20 319 UA 3587 3675 CVG	42 3675 BNA		26 320 UA 286 2075 CMH	45 2075 MCI	25 739 UA 913 397 SAN	40 397 TPA	52 320 UA 2283 1476 SAV	50 1476 PIT		58 320 UA 692 692 MCI	0 692 LGA	42 7MX UA 841 2046 SJU	10 2046 GEG	20 319 UA 3442 3738 ATL	22 3738 MSY	0 40 320 UA 2199 DFW				
S2 S207 A321NEO (117.4)						20 UA 637 LAS	7M9 742 RSW	45 742 RSW	5 319 UA 3607 3544 ICT	57 3544 YYZ	12 319 UA 1505 1911 MCI	0 1911 DCA		27 CRJ UA 4821 3770 SBN	15 3770 MDT	7 7MX UA 2129 2004 SJC	17 2004 ROC	52 319 UA 3750 3700 CLT	36 3700 BHM		52 319 UA 1810 702 RAP	5 702 CLE	48 7M9 UA 1778 2003 STL	50 2003 SNA	14 738 UA 640 1937 LAS	30 1937 CLT	57 37 319 UA 658 MSP				
S2 S206 A321NEO (117.4)						24 7MX UA 342 BOS	4 7MX UA 2139 427 EWR	10 427 EWR	39 7M9 UA 2409 776 PHL	5 776 MCO	49 319 UA 609 1741 DCA	0 1741 LGA	57 CR5 UA 3768 3860 FAR	0 3860 GSO	48 320 UA 1444 2169 MYR	48 2169 DFW		44 319 UA 1979 624 DSM	0 624 DCA		47 7M9 UA 518 1883 ROC	50 1883 SJC	14 UA 5056 DLH		CR5		59				

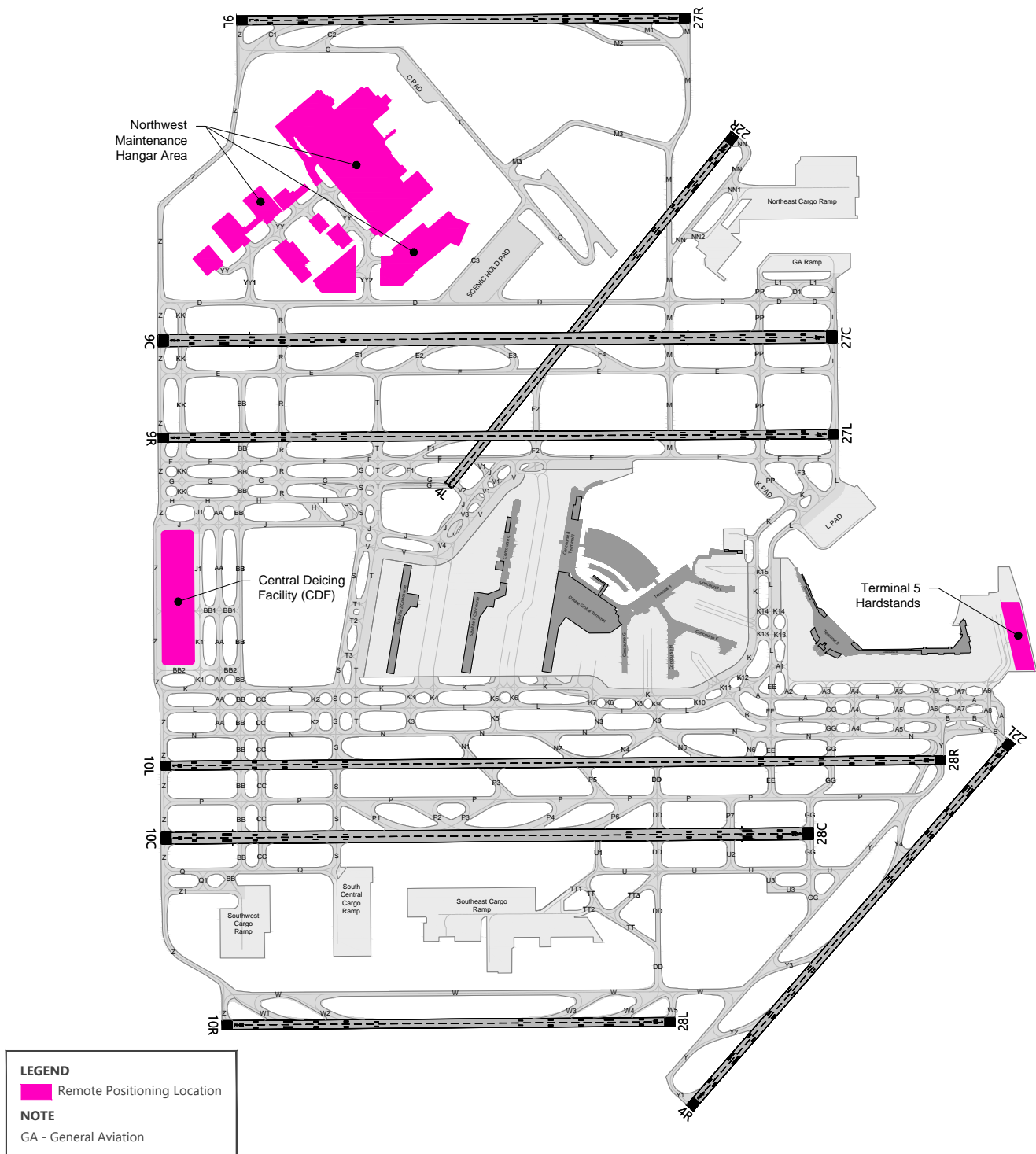
SOURCE: Ricondo & Associates, Inc., December 2019.

EXHIBIT 1-4 (21 OF 22)

Ramp Charts



SOURCE: Ricondo & Associates, Inc., December 2019.

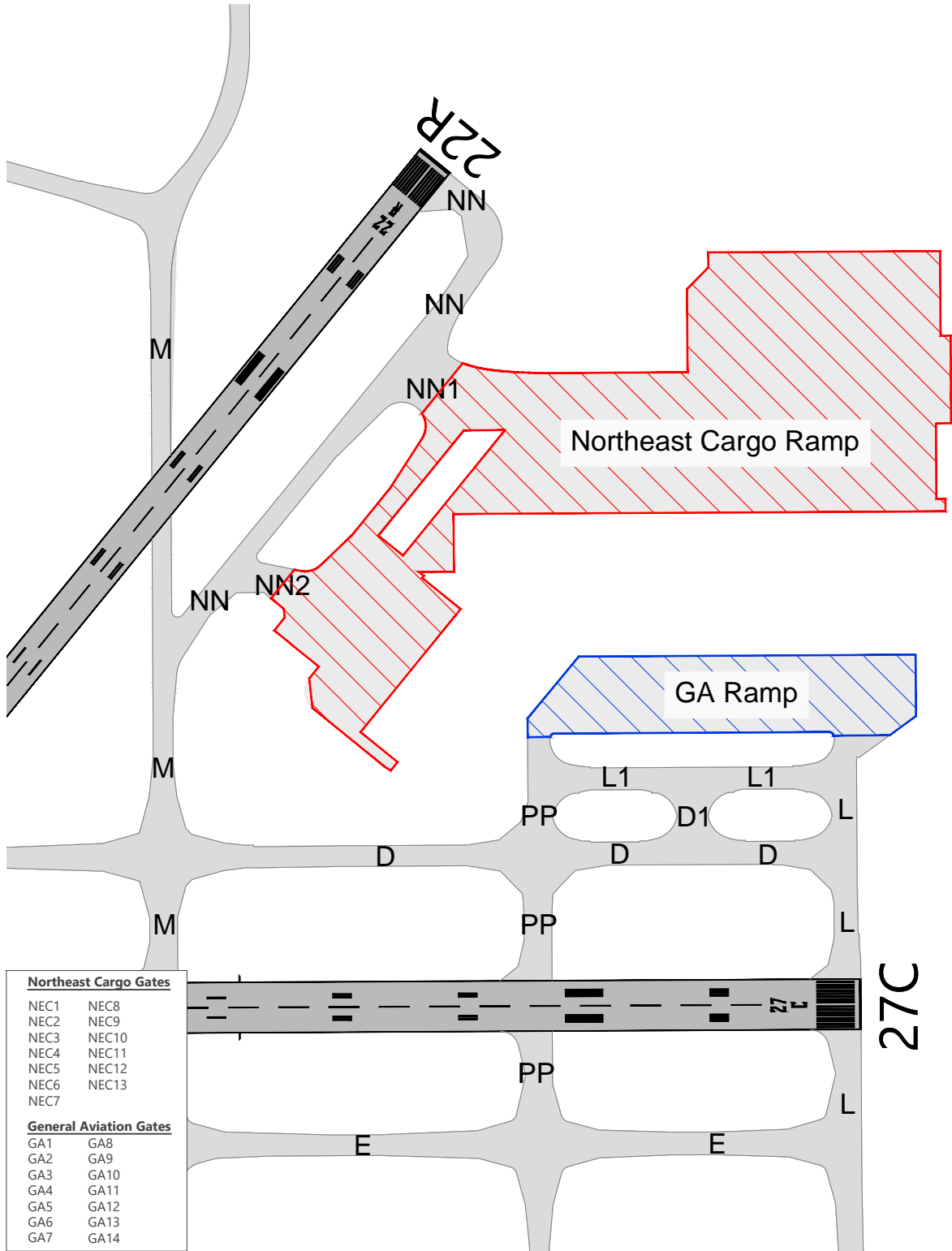


SOURCES: Ricondo & Associates, Inc., *O'Hare International Airport Draft Future Airport Layout Plan*, May 2019; Ricondo & Associates, Inc., June 2019.

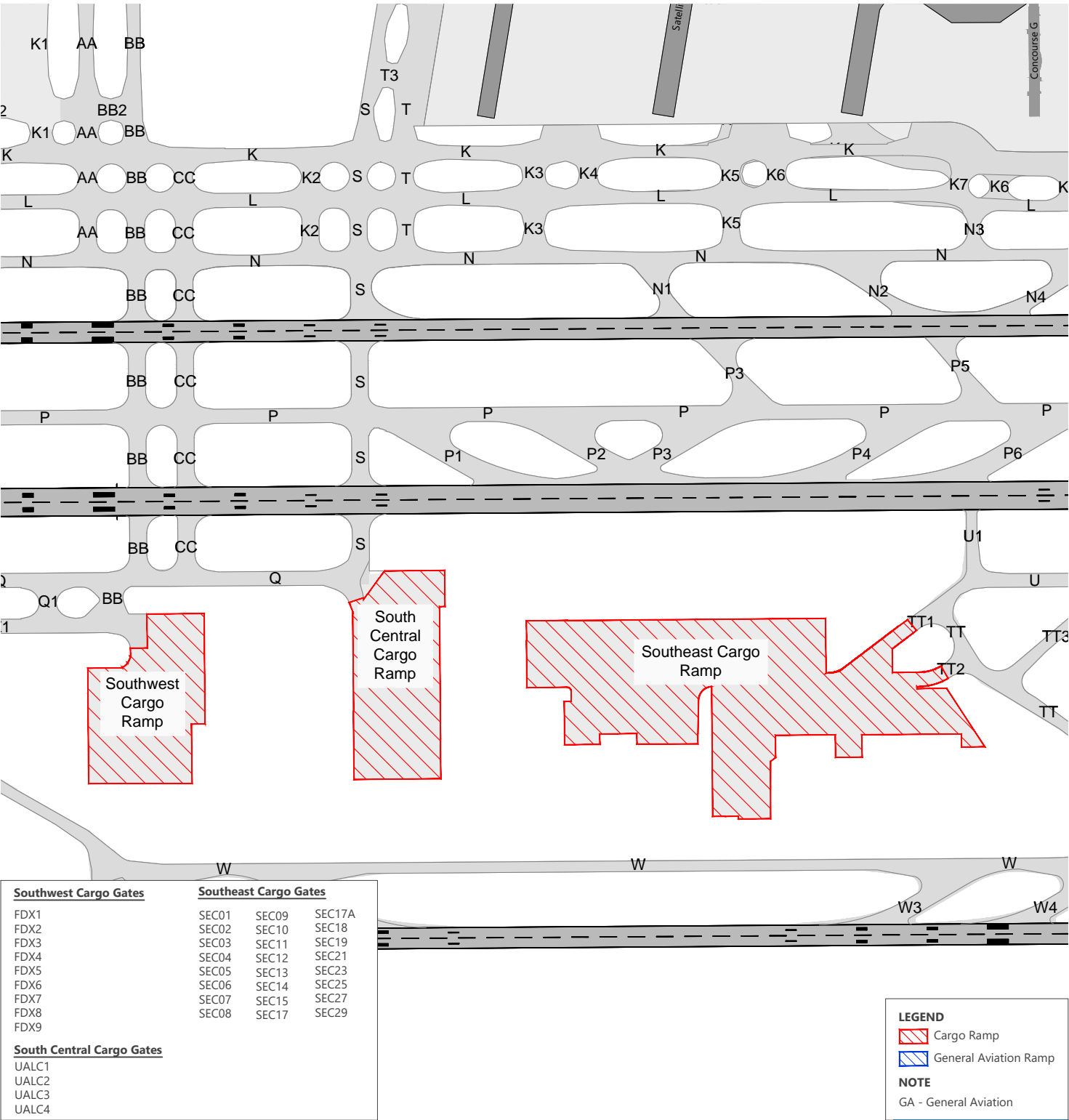
EXHIBIT 1-5

Repositioning Remote Locations

Drawing: P:\Simulation\KORD TAP EA\Assumptions\02-Airfield\AutoCAD\TAP EA - Repositioning Remote Locations.dwg Layout: With Project - Full Build Plotted: Oct 30, 2020, 04:16PM



SOURCES: Ricondo & Associates, Inc., O'Hare International Airport Draft Future Airport Layout Plan, May 2019; Ricondo & Associates, Inc., August 2020.



LEGEND

Cargo Ramp

General Aviation Ramp

NOTE

GA - General Aviation

EXHIBIT 1-6

General Aviation and Cargo Parking Areas



Drawing: P:\Simulation\KORD_TAP_EA\Assumptions\02-Airfield\AutoCAD\TAP EA - GA and Cargo Parking Areas.dwg Layout: With Project - Full Build Plotted: Oct 30, 2020, 04:19PM



1.6 Arrival Fixes by Departure Airport

Arrival fixes were assigned based on the location of the departure airport. **Exhibits 1-7** and **1-8** depict the arrival fix assignments for West Flow and East Flow, respectively.

1.7 Taxi Speeds

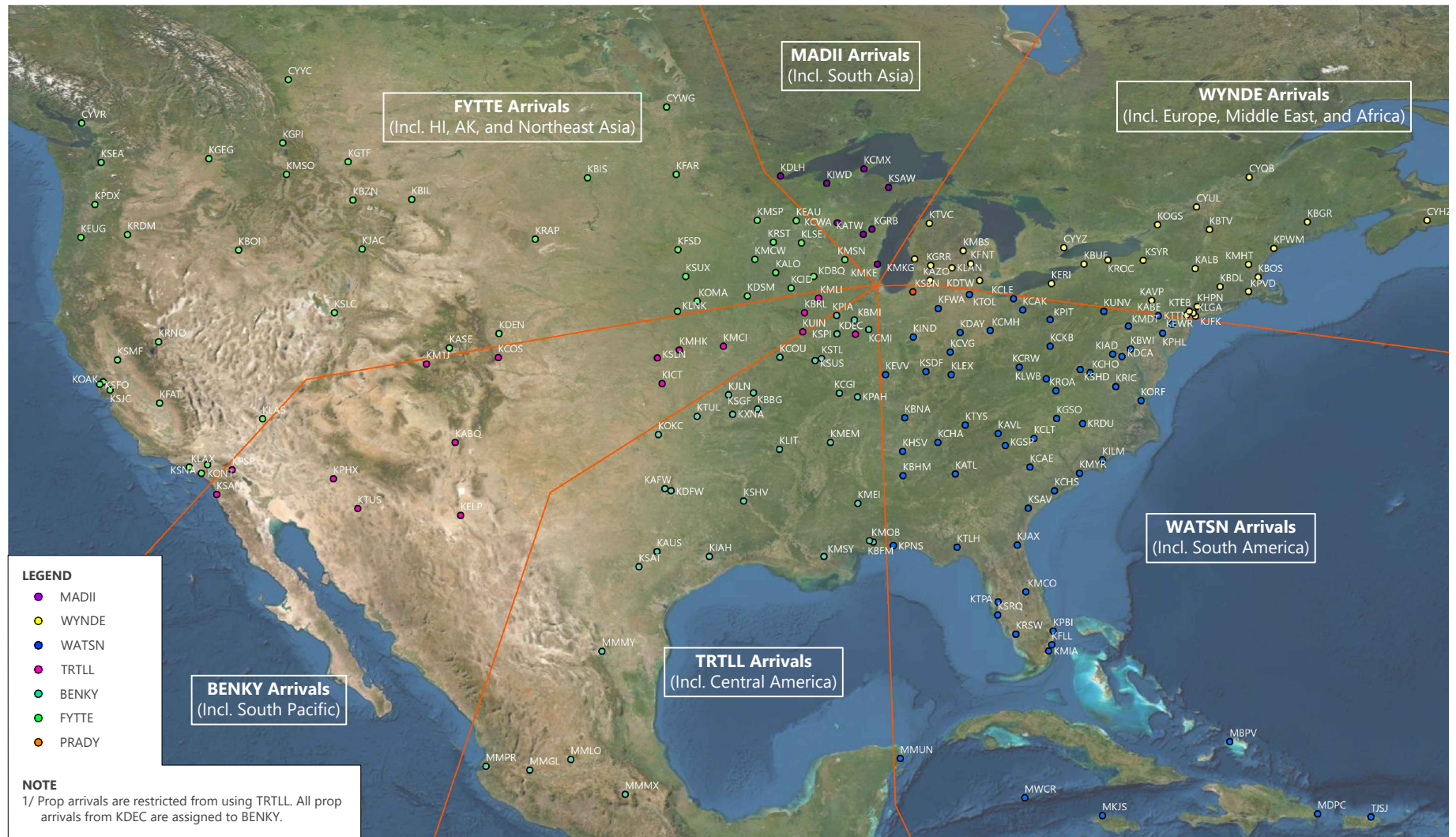
Taxi speeds were established for taxiways and aprons. **Exhibits 1-9** and **1-10** depict the taxi speeds for West Flow and East Flow, respectively.

1.8 Intersection Departure Procedures

Departures utilizing Runways 9R-27L and 10L-28R are encouraged to use intersection departure procedures whenever possible so that arrivals from the outboard runways (Runways 9L-27R, 9C-27C, 10C-28C, and 10R-28L) can taxi behind departing aircraft, reducing delay incurred by both arriving and departing aircraft. However, some departures cannot use intersection departure procedures due to runway length requirements. A subset of widebody⁷ operations that is representative of the characteristics of the operations that typically utilize the full length of the departure runway was restricted from using intersection departure procedures. This subset was defined based on the airline and the great circle distance⁸ from O'Hare to the destination airport. **Tables 1-2** and **1-3** detail the air carrier operations and cargo operations, respectively, that were in the DDFS and restricted from using intersection departures.

⁷ This refers to aircraft with a fuselage wide enough to accommodate two passenger aisles.

⁸ This is the shortest distance between two points on the surface of a sphere, measured along the surface of the sphere.



SOURCE: Terminal Area Plan and Air Traffic Procedures Environmental Assessment Air Traffic Workgroup, August 2019.

EXHIBIT 1-7

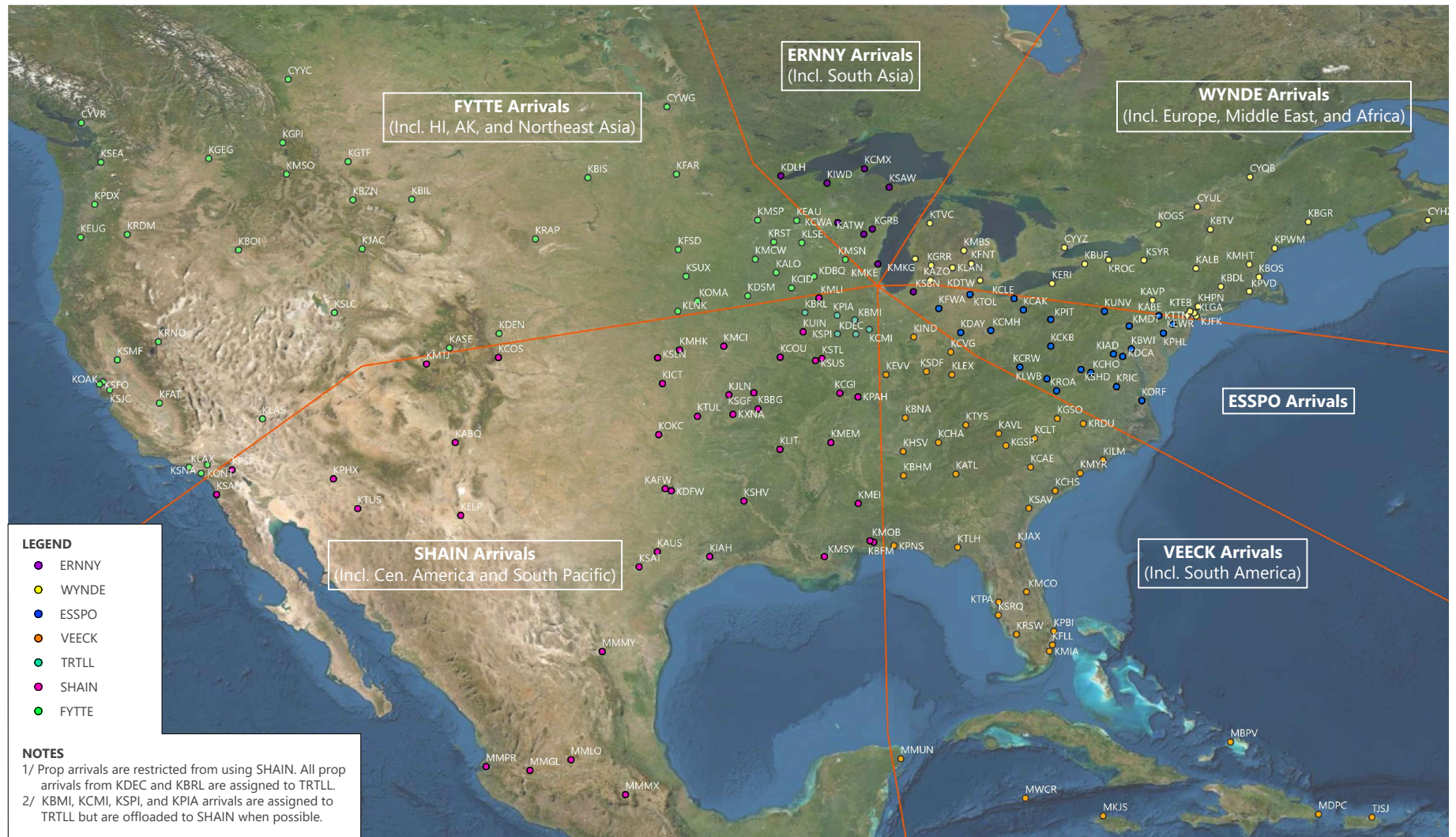


Arrival Fixes by Departure Airport West Flow

Drawing: P:\Simulation\KORD_TAP_EA\Assumptions\04-Airspace\AutoCAD\KORD TAP EA - Arrival Fixes by Departure Airport.dwg Layout: WPFull_West Plotted: Oct 30, 2020, 04:22PM



NOVEMBER 2020



SOURCE: Terminal Area Plan and Air Traffic Procedures Environmental Assessment Air Traffic Workgroup, August 2019.

EXHIBIT 1-8

Arrival Fixes by Departure Airport East Flow



Drawing: P:\Simulation\KORD_TAP_EA\Assumptions\04-Airspace\AutoCAD\KORD TAP EA - Arrival Fixes by Departure Airport.dwg Layout: WPFull_East Plotted: Oct 30, 2020, 04:22PM